

STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0038903; AI 40806; PER20080001** to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

- I. **THE APPLICANT IS:** Town of Blanchard
Town of Blanchard Wastewater Treatment Plant
P.O. Box 428
Blanchard, LA 71009
- II. **PREPARED BY:** Rachel Davis
- DATE PREPARED:** July 24, 2009
- III. **PERMIT ACTION:** reissue LPDES permit LA0038903, AI 40806; PER20080001

LPDES application received: September 29, 2008

LPDES permit issued: October 1, 2004
LPDES permit expired: September 30, 2009

IV. **FACILITY INFORMATION:**

- A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Blanchard.
- B. The permit application does not indicate the receipt of industrial wastewater.
- C. The facility is located on Oak Valley Dr, at the intersection of Oak Valley Dr. & LA Hwy 173 in Blanchard, Caddo Parish.
- D. The treatment facility consists of a bar screen to a flow equalization basin with aerators, thence into an oxidation ditch with aeration equipment, thence into clarifiers, thence into chlorination and dechlorination facilities.

E. **Outfall 001**

Discharge Location: Latitude 32° 38' 20" North
Longitude 93° 53' 20" West

Description: treated sanitary wastewater

Design Capacity: 0.250 MGD

Type of Flow Measurement which the facility is currently using:
Ultrasonic Flowmeter with Totalizer

Statement of Basis

LA0038903; AI 40806; PER20080001

Page 2

V. RECEIVING WATERS:

The discharge is into Moblin Creek, thence into McCain Creek, thence into Twelve Mile Bayou, thence into the Red River in segment 100305 of the Red River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 100305 of the Red River Basin are as indicated in the table below^{1/}:

Degree of Support of Each Use						
Primary Contact Recreation	Secondary Contact Recreation	Limited Aquatic Life	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
N/A	Full	Full	N/A	N/A	N/A	N/A

^{1/}The designated uses and degree of support for Segment 100305 of the Red River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 100305 of the Red River Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 24, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Statement of Basis

LA0038903; AI 40806; PER20080001

Page 3

For additional information, contact:

Ms. Rachel Davis
 Water Permits Division
 Department of Environmental Quality
 Office of Environmental Services
 P. O. Box 4313
 Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:**Final Effluent Limits:**

Subsegment 100305, Mahlin Bayou/McCain Creek, is not listed on LDEQ's Final 2006 303(d) List as impaired, and to date no TMDL's have been established. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by any future TMDLs.

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
CBOD ₅	41.7	20 mg/l	30 mg/l	Limits are set in accordance with the Mahlin Bayou/McCain Creek TMDL
TSS	41.7	20 mg/l	30 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	20.9	10 mg/l	20 mg/l	Limits are set in accordance with the Mahlin Bayou/McCain Creek TMDL
Dissolved Oxygen		5 mg/l	N/A	Limits are set in accordance with the Mahlin Bayou/McCain Creek TMDL

Statement of Basis

LA0038903; AI 40806; PER20080001

Page 4

*Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement. LAC 33:IX.709.B references LAC 33:IX.711 which express BOD₅ and TSS in terms of concentration.

**This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

***Please note that the previous permit had a report limitation for Total Kjeldahl Nitrogen (TKN) to gather information because the stream was impaired for nutrients. LDEQ's Final 2006 303(d) showed no impairments to this stream therefore the TKN report has been removed from this permit.

Other Effluent Limitations:**1) Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) pH

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0038903: Issued: October 1, 2004
Expired: September 30, 2009

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	<u>Monthly Avg.</u>	<u>Weekly Avg.</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	Report	Report	Continuous	Recorder
CBOD ₅	20 mg/l	30 mg/l	2/month	Grab
TSS	20 mg/l	30 mg/l	2/month	Grab
Ammonia-Nitrogen	10 mg/l	20 mg/l	2/month	Grab
Dissolved Oxygen	5 mg/l	---	2/month	Grab
Total Kjeldahl Nitrogen (TKN)	Report	Report	1/quarter	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

Statement of Basis

LA0038903; AI 40806; PER20080001

Page 5

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:**A) Inspections**

A review of the files indicates the following inspections were performed during the period beginning **March 2007** and ending **March 2009** for this facility.

Date: January 23, 2008

Inspector: Ronnie Kay

Findings and/or Violations:

1. Town recently completed rehabilitation of collection system
2. The WWTP was operating satisfactory
3. Effluent samples are collected as required
4. The WWTP has new operators
5. Facility representatives are incorporating good process control methods

B) Compliance and/or Administrative Orders

A review of the files indicates the following most recent enforcement actions administered against this facility:

LDEQ Issuance:

Docket #: WE-CN-06-0073

Date Issued: December 7, 2007

Findings of Fact:

1. Failure to properly operate and maintain systems of treatment and control
2. Failure to notify the Department of overflows
3. Failure to properly operate and maintain its facility
4. Failure to submit non-compliance reports
5. Unauthorized discharges of wastewater
6. Failure to sample and analyze the effluent

Order:

1. Cease all unauthorized discharges
2. Properly operate and maintain the system
3. Submitting original DMRs

C) DMR Review

A review of the discharge monitoring reports for the period beginning **March 2007** through **March 2009** has revealed the following violations:

Period of Excursion	Parameter	Outfall	Permit Limit	Reported Quantity
March 2007	Fecal	001	200	TNTC
	Fecal		400	TNTC
May 2007	TSS	001	20 mg/l	36 mg/l
	TSS		30 mg/l	62 mg/l
	Ammonia		20 mg/l	Did Not Report
March 2008	Fecal	001	400	1800
	CBOD		20 mg/l	30.6 mg/l
	CBOD		30 mg/l	39.3 mg/l

Statement of Basis

LA0038903; AI 40806; PER20080001

Page 6

August 2008	DO Ammonia Fecal Fecal	001	5 mg/l 10 mg/l 200 400	4.4 mg/l 19.2 mg/l 620 1567
September 2008	DO Ammonia Ammonia	001	5 mg/l 10 mg/l 20 mg/l	4.4 mg/l 20.35 mg/l 21 mg/l
October 2008	Ammonia	001	10 mg/l	20.38 mg/l
November 2008	Ammonia	001	10 mg/l	14.02 mg/l
January 2009	TSS TSS CBOD CBOD	001	20 mg/l 30 mg/l 20 mg/l 30 mg/l	55 mg/l 61 mg/l 29.4 mg/l 35.9 mg/l
February 2009	TSS Ammonia Ammonia	001	20 mg/l 10 mg/l 20 mg/l	28 mg/l 18.1 mg/l 21.4 mg/l
March 2009	TSS TSS TSS Ammonia Fecal Fecal CBOD CBOD	001	20 mg/l 30 mg/l 41.7 lbs/day 20.9 lbs/day 200 400 20 mg/l 30 mg/l	76 mg/l 114 mg/l 184.7 lbs/day 39.6 lbs/day 532 600 35.6 mg/l 57 mg/l

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's, if the effluent standard, limitations, water quality studies or TMDL's so issued or approved

- a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
- b) Controls any pollutant not limited in the permit; or
- c) Requires reassessment due to change in 303(d) status of waterbody; or
- d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past

Statement of Basis

LA0038903; AI 40806; PER20080001

Page 7

compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.250 MGD.

Effluent loadings are calculated using the following example:

$$\text{BOD: } 8.34 \text{ lb/gal} \times 0.250 \text{ MGD} \times 10 \text{ mg/l} = 41.7 \text{ lb/day}$$

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Effluent CharacteristicsMonitoring Requirements

	<u>Measurement</u>	<u>Sample</u>
	<u>Frequency</u>	<u>Type</u>
Flow	Continuous	Recorder
CBOD ₅	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Dissolved Oxygen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

Pretreatment Requirements

Based upon consultation with LDEQ pretreatment personnel, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0038539.

This language is established for municipalities that do not have either an approved or required Pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

Pollution Prevention Requirements

The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

Statement of Basis

LA0038903; AI 40806; PER20080001

Page 8

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a reissue permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Blanchard, Town of Blanchard Wastewater Treatment Plant, September 29, 2008.